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Combat Trauma Training for Current Casualty Care

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The US Army's health service support in combat operations is organized into echelons of care from levels I to IV, with level or echelon V care located outside the combat theater, and usually consisting of Department of Defense (DOD) or Department of Veterans Affairs (VA) hospitals. These levels of care denote the available medical capabilities of each location. Patient evacuation usually occurs from one level to the next as necessary. Level I is unit-level health care and the first care a soldier receives after injury. It includes treatment and evacuation from the point of injury or illness to the unit's aid station. Further evacuation proceeds through Level IIa (forward surgical team), Level III (combat support hospital), Level IV (field or general hospital) and Level V.

Because provider specialty, background, experience and training can vary, combat medical courses have been developed for various levels of care to use current battlefield epidemiology and apply "best practice" principles for health care providers being deployed into combat. These courses were designed to provide physician assistants, physicians, nurses, allied health personnel and senior medics a practical working knowledge of how to deal with the injured patient in the combat environment. Course information includes trauma resuscitation methods, lessons learned from past and current

combat epidemiology and updates on newly developed technologies. Training consists of didactic lectures as well as hands-on practical training in live tissue labs. Didactic topics include the initial assessment of the patient, specific trauma injuries, environmental injuries and emergency surgical procedures. Three new courses have been successfully created to specifically address Level I through Level III care. Tactical Combat Casualty Care (TC3) for Level I training is a 3-day course aimed at first responders at the point of injury and focuses on basic life-saving interventions and early recognition of shock. The Tactical Combat Medical Care (TCMC) course for Level II care and is a 7-day course that focuses on advanced life-saving interventions and live tissue training. The Joint Forces Combat Trauma Management Course (JFCTMC), a 5-day course for Level III combat support hospital care providers, involves extensive didactic instruction on combat morbidity and mortality and application of life-saving interventions. Breakout sessions provide instructions for specific subspecialties (orthopedic, general surgery, emergency medicine, anesthesia, nursing, etc.). Extensive cadaver and live tissue labs are used to improve surgical and emergent procedure skills as well as team building exercises and use of simulated casualty scenarios.

The evaluation, resuscitation and management of the wounded soldier presents a unique challenge to combat medical providers. The modern battlefield and advances in technology have changed our way of thinking in our approach to combat casualty management. Through lessons learned we have found that traditional ATLS/BTLS formats are not applicable to the combat casualty. Battlefield trauma epidemiology will continue to change our methods of treatment for combat casualties.

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